



CREATININE TEST-Kinetic Method **FOR BECKMAN CX AND LX-20 SYSTEMS**

CREA

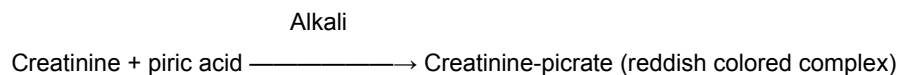
INTENDED USE

For the quantitative determination of creatinine in serum

CLINICAL SIGNIFICANCE

Creatinine is excreted as a waste product by the kidneys. Increased serum creatinine levels usually indicate impairment of renal function. Creatinine appears in the glomerular filtrate and is not reabsorbed by the tubule. Hence, any condition that reduces the glomerular filtration rate will result in the increase of creatinine concentration in plasma. Since the excrete rate of creatinine is relatively constant and since its production rate is not influenced by protein catabolism or other external factors. The concentration of creatinine in serum is, therefore, a good measure of renal glomerular function.

PRINCIPLE



SPECIMEN COLLECTION AND PREPARATION

The choice of specimen is serum and the use of plasma is not recommended. Creatinine in serum is stable for 7 days at room temperature, 28 days in the refrigerator and for at least 180 days when frozen. Hemolysis should be avoided.

For urine specimens, it should be diluted 1:100 with water. Avoid conditions which could allow bacterial growth. Preservation with fluoride, thymol or boric acid during collection is recommended.

REAGENT:

· Each kit contains:

- | | | |
|--------------------------------|-------------|-----------------------------|
| 1. 2 x 300 Test (Ready-to-use) | | For Beckman CX-4 |
| 2. Alkaline solution | 3 x 1600 ml | For Beckman CX-3/ and LX-20 |
| Picric acid | 3 x 400 ml | |

Before use ,carefully pour 400 ml of picric Acid solution into 1600 ml of alkaline solution.

· Components: NaOH 0.188 mol/l
 picric acid 0.05 mol/l

STORAGE: Room temperature

PRECAUTIONS:

1. For in vitro diagnostic use only.
2. Reagent solution contains sodium hydroxide and picric acid . Should not be pipette by mouth or contact to skin .
3. Since all specimens are potentially infectious, they should be handled with appropriate precautions and practices in accordance with Biosafety level 2 as recommended by USA NIH manual Biosafety in Microbiological and Biomedical Laboratories, and in accordance with National or local regulations related to the safety precautions of such materials.
4. Each laboratory has to perform the quality control test to assure the results being reliable before running the specimen tests



PROCEDURES: The reagents is used in accordance with Beckman analyzer parameters and procedures.

EXPECTED VALUE:

Serum: 52~124 $\mu\text{mV/L}$ (0.6~1.4 mg/dl)

Urine: Male: 20~26 mg/kg body weight/24h

Females: 14~22 mg/kg body weight/24h

*The unit conversion for creatinine is 1 mg/dl = 88.4 $\mu\text{mol/l}$

Note: It is generally recommended that each laboratory establish its own range of normal values for commonly performed tests.

REFERENCES:

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